

Four new species and one new subspecies of the genus *Ourapteryx* Leach (Geometridae, Ennominae) from Southeast Asia

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Abstract The following four new species and one new subspecies of *Ourapteryx* are described: *O. cordifera* from Sulawesi and Flores, *O. nonmarginata* from Palawan, Philippines, *O. sulphurea* from Negros, Philippines, *O. diluculum* from Sulawesi and *O. picticaudata palawanensis* from Palawan. Moth specimens and genitalia of both sexes are illustrated.

Key words *Ourapteryx*, furca, Sulawesi, Flores, Philippines, Palawan, Negros.

Ourapteryx cordifera sp. nov. (Figs 1, 2)

Wingspan: ♂ 49–51 mm, ♀ 57 mm. Very similar to *O. podaliriata* Guenée (Holloway, 1994: 57, fig. 79 (male genitalia), pl. 3: 1), but hindwing with tail broader, with spatulate or a little expanded apex, shoulder at the end of vein 6 weaker. Colour and maculation of wings almost identical with *podaliriata*.

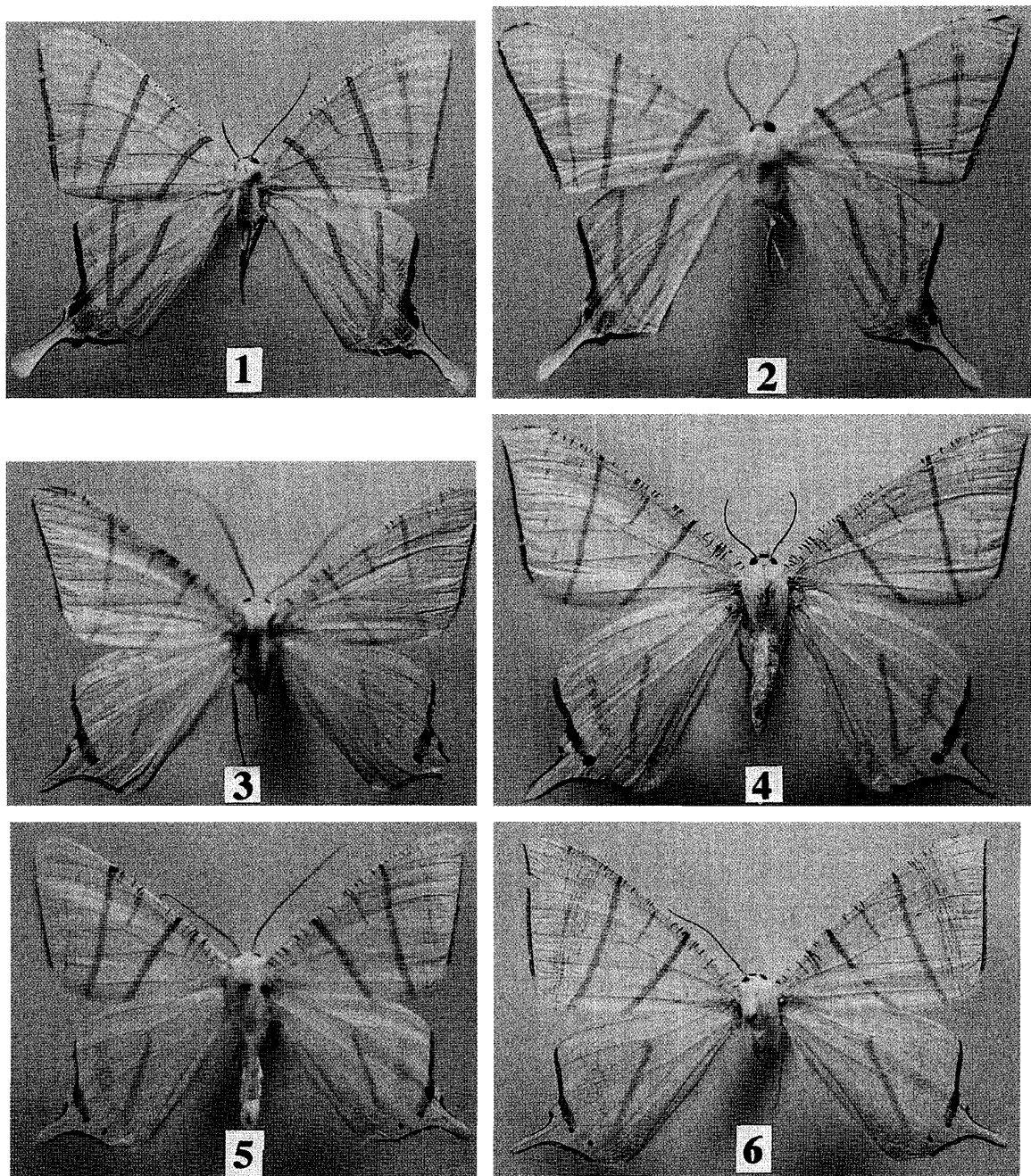
Male genitalia (Fig. 15). Gnathos with central scobinate area oblong. Valva with costa weakly curved, apex triangularly produced, valvula with flat apex. Furca at right side straight, scarcely reaching gnathos. Cornuti two masses of spines, the caudal spines much longer and larger than the basal ones. In *podaliriata* the characteristic stick-like process of furca is replaced by a broad apical plate, an exceptional structure for *Ourapteryx*.

Female genitalia (Fig. 20). Ductus bursae strongly sclerotized, less slender than in *podaliriata*, almost straight, a little longer than double the width. Corpus bursae spherical, densely wrinkled, signum absent.

Material examined. Holotype, ♂, S. W. Celebes, Pangean near Maros, 2,000 ft, March 1938 (J. P. A. Kalis), Rothschild Bequest, B. M. 1939-1, "*Ourapteryx podaliriata cordifera* Prout, MS", in coll. BMNH. Paratypes. S. Sulawesi, Quarles Mountains, ca 30 km N Rantepao, Polo Polo, 2,000 m, xii. 1995, 1 ♂ (local collector); S. Sulawesi, Street Palopo to Rantepao, Puncak Palopo, 1,100 m, 25. ix. 1995, 1 ♀ (H. Schnitzler); Flores (W), Prov. Nusa Tenggara Timur, 15 km E Labohanbajo, 200 m, primary forest, 9–12./22. iv. 1996, 2 ♂ (R. Brechlin), in coll. ZFMK. S. Sulawesi, Puncak Palopo, 900–1,300 m, iv. 1998, 1 ♂ (local collector), in coll. M. Schaarschmidt, Leipzig. C. Sulawesi, Sampuraga, 1,300 m, 23. viii. 1994, 3 ♂ (T. Masui), 2 ♂ in coll. TM and 1 ♂ in coll. HI. Locality as above, x–xi. 1985, 1 ♂ (local collector), in coll. HI.

Distribution. Sulawesi, Flores.

Although the male genitalia of this new species are quite distinct from those of *podaliriata*, its shape of wings, colour and maculation and female genitalia are very similar to it. The absence of signum and strongly wrinkled surface of corpus bursae shared between the two species are unique in *Ourapteryx*.

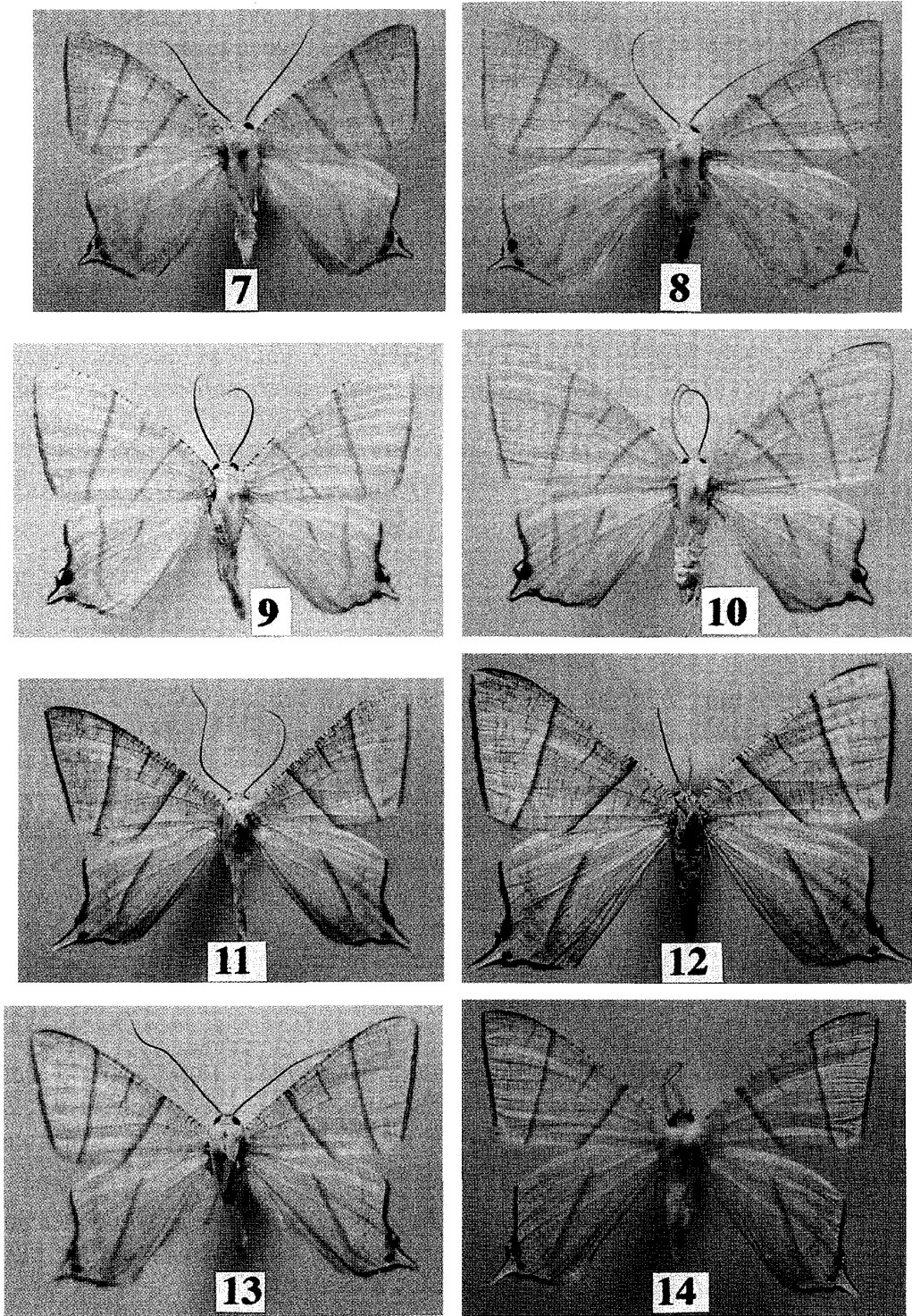


Figs 1-6. *Ourapteryx* spp. 1. *O. cordifera* sp. nov., paratype ♂. 2. *Ditto*, paratype ♂. 3. *O. nonmarginata* sp. nov., paratype ♂. 4. *Ditto*, paratype ♀. 5. *O. marginata* Hampson, ♂. 6. *Ditto*, ♀.

***Ourapteryx nonmarginata* sp. nov.** (Figs 3, 4)

Wingspan: ♂ 48-53 mm, ♀ 67 mm. Closely related to *O. marginata* Hampson (1891: 104, pl. 150: 17) (Figs 5, 6) from Southwest India, but wings pure white, not thinly hued with yellow as in *marginata*. Transverse lines narrower, forewing with subterminal striae thinner. Hindwing with two red spots at the base of tail, while in *marginata* there are two black dots and a much smaller red spot at the shoulder.

Also similar to *O. claretta* Holloway (1976: 79, fig. 589 (male genitalia), as *O. clara* Butler;



Figs 7-14. *Ourapteryx* spp. 7. *O. sulphurea* sp. nov., paratype ♂. 8. *Ditto*, paratype ♀. 9. *O. versuta* Prout, ♂. 10. *Ditto*, ♀. 11. *O. diluculum* sp. nov., paratype ♂. 12. *Ditto*, paratype ♀. 13. *O. picticaudata palawanensis* subsp. nov., paratype ♂. 14. *Ditto*, paratype ♀.

id., 1982: 250; *id.*, 1994: 57, fig. 80 (male genitalia), pl. 3: 3) from Sundaland, but transverse lines narrower, forewing with fringe darker, hindwing with tail a little more slender, termen from the shoulder of tail to near tornus more clearly black. In *claretta* the spots at the base

of tail are replaced by a bluish streak. *O. clara* Butler (Yazaki, 1992: 40, pl. 12: 23) from Northeast India to North Vietnam is also a similar species, but in it almost always the bluish streak at the base of the tail is divided into two.

Male genitalia (Fig. 16). Very similar to *marginata*, but furca at right side almost straight, while in *marginata* (Fig. 17) it is strongly curved inward.

Female genitalia (Fig. 21). Both in this species and *marginata* (Fig. 22) ductus bursae is extremely long, coiled, strongly ribbed excepting the membranous posterior (or caudal) part.

Material examined. Holotype, ♂, S. Palawan, Mt Mantalingajan, 600–800 m, 2–12. viii. 2000 (D. Mohagan), in coll. ZFMK. Paratypes. Type-locality, Tagemburg, 1,150 m, 15. ix. 1961, 1 ♂ (Noona Dan Exp. 61–62), in coll. ZMUC. S. Palawan, Brookes Point, 21. iv. 1990, 1 ♂ (local collector), in coll. C. G. Treadaway, later transferred to Senckenberg-Museum. Data as holotype, 16 ♂, in coll. ZFMK and in coll. M. Schaarschmidt, Leipzig. Type-locality, 6–13. i. 2000, 1 ♂ (D. Mohagan); *ditto*, Brookes Point, 800 m, i. 2002, 3 ♂ (local collector), in coll. Schaarschmidt. Type-locality, 6–14. i. 2000, 1 ♂ 1 ♀ (local collector), ex coll. TM, in coll. HI.

Distribution. Philippines (Palawan).

***Ourapteryx sulphurea* sp. nov.** (Figs 7, 8)

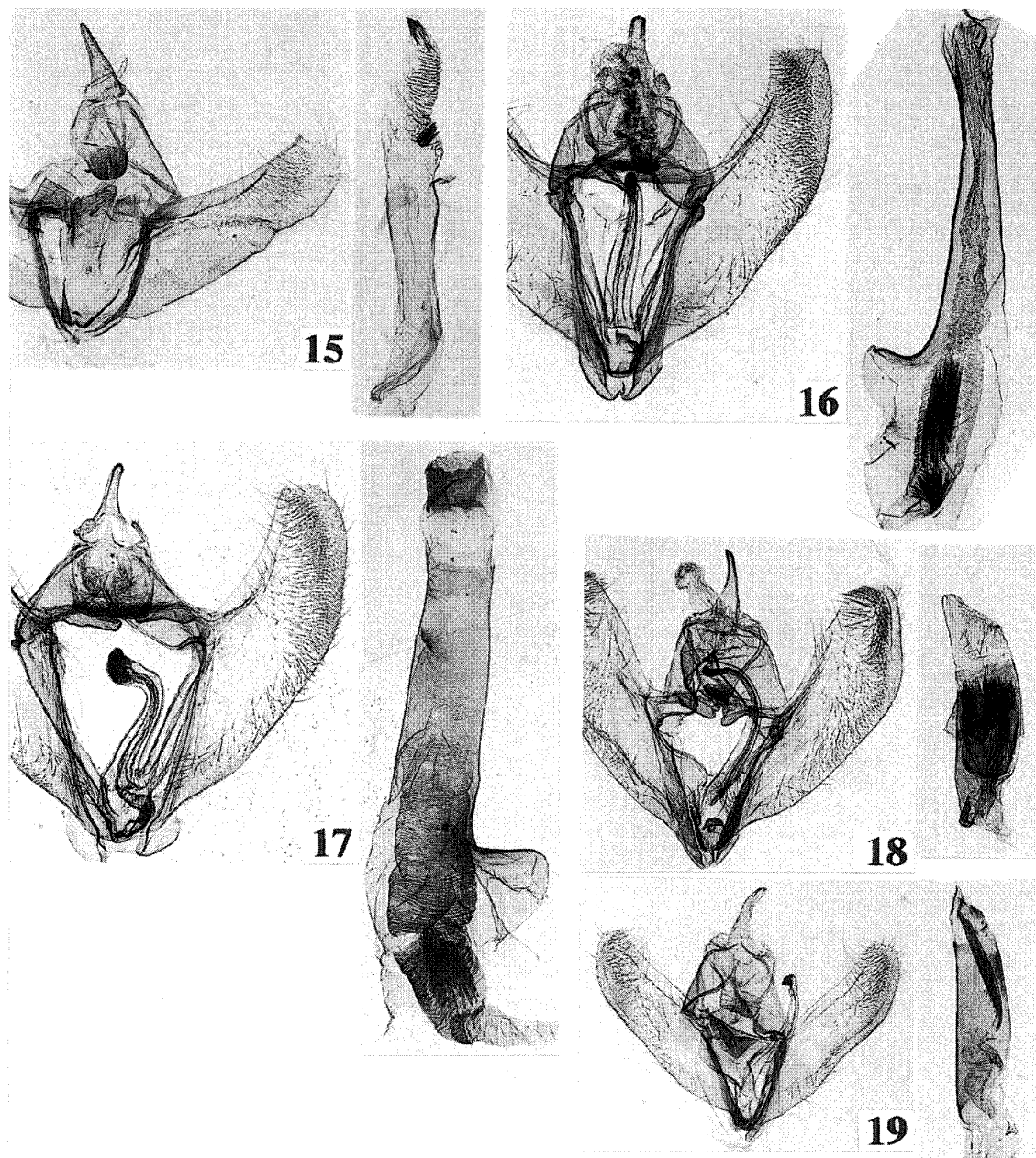
Wingspan: ♂ 37–42 mm, ♀ 40–43 mm. Very similar to sulphur-yellow winged specimens of *O. versuta* Prout (1928: 208) (Figs 9, 10) from Sulawesi, but hindwing with tail more sharply pointed. Forewing with discocellular bar more conspicuous. Hindwing with costal area to dorsal margin of cell and vein 6 widely white, unmarked, while in *versuta* the unmarked area is confined to a narrow dorsal marginal area. Postmedian line starting from near dorsal angle of discocellulars, reaching vein 2, then incurved and gradually vanishing to near tornus, while in *versuta* postmedian line starting from vein 8, running midway between discocellular bar and termen like *podalirata* and *cordifera*, vanishing at vein 2 or running into hindmargin near tornus. In both species there are two red spots surrounded by a dark grey shade at the base of the tail, but the dorsal one in this new species is smaller than in *versuta*.

Male genitalia (Fig. 18). Uncus much longer than in *versuta*. Furca at right side gently incurved, reaching near middle of gnathos like the preceding species, while in *versuta* furca at left side is very slender, almost straight to the middle of uncus. Aedeagus broader and shorter, spines of cornutus much thicker than in *versuta*.

Female genitalia (Fig. 21). Ductus bursae very broad, nearly as long as corpus bursae, thinly ribbed. In *versuta* ductus bursae is much shorter, continuing to ovate corpus bursae, the caudal part of which is sclerotized as a broad and irregular band, an unusual structure for *Ourapteryx*.

Material examined. Holotype, ♂, Negros, Prov. Negros Occidental, Mt Canlaon, 2,050 m, W-route via Mambucal, Primary forest, vi. 1998 (local collector), in coll. ZFMK. Paratypes. Data as holotype, 73 ♂ 20 ♀ in coll. ZFMK and in coll. M. Schaarschmidt, Leipzig, and 2 ♂ 2 ♀ in coll. HI. Negros, Mt Canlaon, 2,550 m, 26–29. iii. 1998, 3 ♂ 7 ♀ in coll. TM and *ditto*, 2 ♂ 1 ♀ in coll. HI. “Negros, 1993”, 1 ♂, in coll. HI.

Distribution. Philippines (Negros).



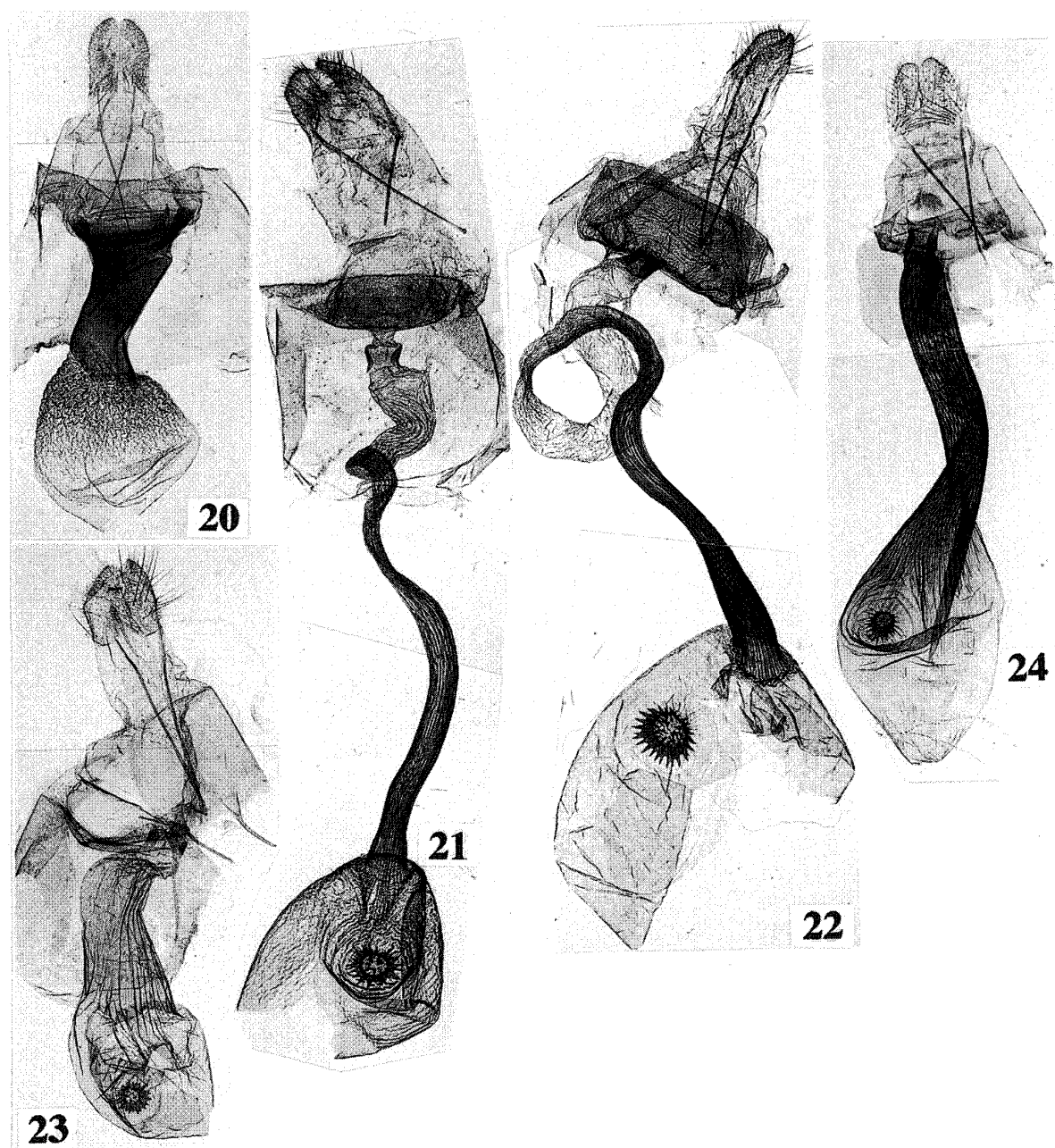
Figs 15–19. Male genitalia of *Ourapteryx* spp. 15. *O. cordifera* (HI Slide 17271). 16. *O. nonmarginata* (ZMC). 17. *O. marginata* (HI Slide 2627). 18. *O. sulphurea* (HI Slide 15487). 19. *O. diluculum* (HI Slide 12274).

***Ourapteryx diluculum* sp. nov.**

Apparently Sulawesian representative of *O. picticaudata* Walker (Holloway, 1994: 57, figs 81, 82 (male genitalia), pl. 3: 2) from Peninsular Malaysia, Sumatra and Borneo.

Shape of wings and maculation very similar to *picticaudata*, but hindwing with termen incurved before the shoulder of tail, tail more slender, forewing with brownish grey striation denser.

Male genitalia (Fig. 19). Gnathos not specialized as in *picticaudata*, but normal with flat central process. Furca much shorter, tip rounded. Cornuti represented by fewer and longer



Figs 20-24. Female genitalia of *Ourapteryx* spp. 20. *O. cordifera* (ZFMK). 21. *O. non-marginata* (HI Slide 17277). 22. *O. marginata* (HI Slide 17363). 23. *O. sulphurea* (HI Slide 17275). 24. *O. diluculum* (HI Slide 12297).

spines.

Female genitalia (Fig. 24). Corpus bursae much longer than in *picticaudata*, strongly ribbed, corpus bursae and signum much smaller.

Material examined. Holotype, ♂, W. Celebes, G. Tompoe, Paloe, 2,700', Feb. 1937, (J. P. A. Kalis), Rothschild Bequest B. M. 1939-1, "*Ourapteryx diluculum* Prout, MS", in coll. BMNH. Paratypes. W. Celebes, data as holotype, 1 ♂; W. Celebes, Koelawi Paloe, 3,100', February 1937, 1 ♂; W. Celebes, Lindoe Paloe, 3,700', April 1937, 2 ♂ (J. P. A. Kalis), Rothschild Bequest B. M. 1939-1, in coll. BMNH. S. Sulawesi, street from Palopo to Rantepao, Puncak

Palolo, 1,100 m, 25. ix. 1995, 7 ♂ (H. Schnitzler); C. Sulawesi, street from Tentena to Taripa, Pompangeo Mts, ca 5 km N Taripa, 700 m, 24. ix. 1995, 1 ♀ (as above); S. Sulawesi, Quarles Mts, ca 30 km N Rantepao, Polo Polo, 2,200 m, 26–28. ix. 1995, 8 ♂ 3 ♀ (as above); C. Sulawesi, vic. Mamasa, 2°57'S 119°24'E, 15–16. x. 1995, 7 ♂ (Gala); C. Sulawesi, Latimojong, 10–11. x. 1995, 3 ♂ (Johan); C. Sulawesi, Tambusisi Mts, 1,800 m, 1°45'S 121°27'E, ii. 1996, 2 ♀ (local collector); S. Sulawesi, Col de Batas, 1,100 m, 26. viii. 1991, 1 ♂ (B. Turlin); S. Sulawesi, Rte de Rantepao a Palopo, 1,700 m, x. 1995, 5 ♂ (G. Lecourt); *ditto*, x. 1996, 2 ♂; C. Sulawesi, Sampuraga, 1,500–1,700 m, vi. 1996, 4 ♂ (as above), in coll. ZFMK. S. Sulawesi, Puncak Palopo, 900–1,000 m, xii. 1998 (local collector), in coll. ZSM. Sulawesi, Sampuraga, 1,500 m, 3. xii. 2000, 2 ♂ 1 ♀ (G. Orhant), in coll. Orhant, France. S. Sulawesi, Puncak Palopo, 900–1,300 m, i. 1997, 11 ♂ 2 ♀ (local collector); *ditto*, vii. 1997, 4 ♂ 2 ♀; *ditto*, iv. 1998, 7 ♂ 1 ♀; *ditto*, vi. 1998, 6 ♂; C. Sulawesi, Taripa, 800 m, xii. 1997, 9 ♂ 2 ♀; *ditto*, ii. 1998, 7 ♂ (local collector), in coll. M. Schaarschmidt, Leipzig. C. Sulawesi, Samplaga, x–xi. 1985, 1 ♂; *ditto*, iv. 1994, 1 ♂ 1 ♀; *ditto*, x. 1995, 5 ♂; Puncak Dingin, 7–10. v. 1985, 1 ♂; *ditto*, x–xi. 1985, 5 ♂ 1 ♀; Pulu Pulu, 700–1,000 m, 25 km N of Partepac, iv. 1995, 1 ♂ 1 ♀ (local collector); S. Sulawesi, north border, Palolo, 700 m, x. 1985, 2 ♂ (S. Nagai), in coll. HI.

Distribution. Sulawesi.

***Ourapteryx picticaudata palawanensis* subsp. nov.** (Figs 13, 14)

In appearance this subspecies is almost identical with the nominotypical subspecies (Holloway, 1994, *loc. cit.*), but male genitalia with furca longer and female genitalia with ductus bursae more strongly sclerotized.

Material examined. Holotype, ♂, Palawan, Mt Matalingajan, 800 m, xii. 1997 (leg. Bal), [ex coll. Dr. R. Brechlin, ex Museum Witt], in coll. ZFMK. Paratypes. Type-locality, 600 m, 3 & 10. ix. 1961, 2 ♂ (Noona Dan Exp. 61–62), in coll. ZMUC. Palawan, Lanquan, 21. ix. 1984, 1 ♂ (C. G. Treadaway), in coll. Treadaway. Type-locality, 600–800 m, 2–10. viii. 2000, 1 ♂ 1 ♀ (D. Mohagan); Brookes Point, 800 m, i. 2002, 2 ♂ (local collector), in coll. M. Schaarschmidt, Leipzig. Type-locality, 600–700 m, 6–14. i. 2000, 2 ♂ (local collector), ex coll. TM, in coll. HI. Palawan, Napson, Mt Salakot, 700 m, 18. iii. 1996, 4 ♂ 2 ♀ (J. S. Petersen), in coll. HI.

Distribution. Philippines (Palawan).

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摘 要

東南アジアからの *Ourapteryx* 属 (シャクガ科エダシャク亜科) の 4 新種と 1 新亜種の記載
(井上 寛)

Ourapteryx cordifera (スラウェシ・フロレス), *O. nonmarginata* (フィリッピンのパラワン), *O. sulphurea* (フィリッピン・ネグロス), *O. diluculum* (スラウェシ) の 4 新種と *O. picticaudata palawanensis* (パラワン) という 1 新亜種を記載した。

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